CLAIMS

1.   An isolated compound which modulates G-CSF-induced cellular responses wherein the compound inhibits or activates G-CSF activity or levels *via* a SOCS molecule.

2.   The compound of Claim 1 wherein the compound up-regulates the activity or levels of SOCS-3.

3.   The compound of Claim 1 wherein the compound down-regulates the activity or levels of SOCS-3.

4.   The compound of any one of Claims 1 to 3 wherein the compound is a nucleic acid molecule.

5.   The compound of Claim 4 wherein the nucleic acid molecule is an oligonucleotide.

6.   The compound of Claim 4 or 5 wherein the nucleic acid molecule is mRNA, RNAi, siRNA or DNA or a complex containing same.

7.   The compound of Claim 6 wherein the nucleic acid molecule is a sense or antisense oligonucleotide.

8.   The compound of any one of Claims 1 to 3 wherein the compound is a proteinaceous molecule.

9.   The compound of any one of Claims 1 to 3 wherein the compound is a non-protein chemical.

10.   A pharmaceutical composition comprising a component of any one of Claims 1 to 11 and one or more pharmaceutically acceptable carriers and/or diluents.

11.   The pharmaceutical composition of Claim 10 wherein the composition is a nucleic acid molecule.

12.   The pharmaceutical composition of Claim 11 wherein the composition is a gene therapy composition.

13.   A method for modulating G-CSF-induced cellular responses in a mammal, said method comprising administering to said mammal an effective amount of a compound of any one of Claims 1 to 9 or a composition of Claim 10 or 11 or 12.

14.   The method of Claim 13 wherein the mammal is a human.

15.   The method of Claim 13 or 14 wherein the compound inhibits or elevates levels of SOCS-3.

16.   An animal model useful for screening for compounds which modulate G-CSF-induced cellular responses, said model comprising a genetically modified animal which comprises cells which produce elevated or reduced levels of SOCS-3.

17.   The animal model of Claim 16 wherein the animal is a non-human primate, lower primate, mouse, rat, rabbit, sheep, goat or pig.